

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE 27943-00417 09/909,192 07/19/2001 Bo Lee 9137 EXAMINER 38065 7590 04/22/2004 ERICSSON INC. MILLER, BRANDON J 6300 LEGACY DRIVE ART UNIT PAPER NUMBER M/S EVR C11 PLANO, TX 75024 2683 DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/909,192	LEE ET AL.
Office Action Summary	Examiner	Art Unit
	Brandon J Miller	2683
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD IN THE MAILING DATE OF THIS COMMUN. - Extensions of time may be available under the provision after SIX (6) MONTHS from the mailing date of this common of the period for reply specified above is less than thirty (1). If NO period for reply is specified above, the maximum sometime or period for reply within the set or extended period for reply any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	IICATION. s of 37 CFR 1.136(a). In no event, however, may a munication. 30) days, a reply within the statutory minimum of thir attutory period will apply and will expire SIX (6) MOI y will, by statute, cause the application to become A	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		·
1) Responsive to communication(s) fil	ed on	
2a) This action is FINAL.	2b)⊠ This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) Claim(s) 1-26 is/are pending in the 4a) Of the above claim(s) is/a 5) Claim(s) is/are allowed. 6) Claim(s) 1-26 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restri	are withdrawn from consideration. ction and/or election requirement. e Examiner. a) accepted or b) objected to	-
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
2. Certified copies of the priority3. Copies of the certified copies	documents have been received. documents have been received in A of the priority documents have been onal Bureau (PCT Rule 17.2(a)).	pplication No received in this National Stage
Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (ID) Information Disclosure Statement(s) (PTO-1449 of Paper No(s)/Mail Date <u>5-6</u> .	PTO-948) Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152)

Art Unit: 2683

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 6, 8-11, 15-18, 21, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salonaho in view of Vijayan.

Regarding claim 1 Salonaho teaches a telecommunications system within a Code

Division Multiple Access network (see col. 4, lines 16-17). Salonaho teaches a network having a
base station serving a sector (see col. 7, lines 9-11). Salonaho teaches a base station further
storing data packets associated with data sessions involving one or more mobile terminals (see
col. 4, lines 33-35, col. 10, lines 23-25, and col. 12, lines 5-6). Salonaho teaches a threshold
value having a size and processing means to receive the threshold value (see col. 10, lines 2528). Salonaho teaches selecting one or more mobile terminals for communication connection
when a threshold value size exceeds a predefined threshold (see col. 9, lines 20-23 and col. 10,
lines 12-15). Salonaho teaches prioritizing a subscriber terminal performing handover (see col.
110, lines 29-30). Salonaho does not specifically teach a CDMA2000 network, one or more
mobile terminals whose respective data rate controls (DRC) are pointed towards a sector, an
overhead message handler adapted to receive a queue size, or transmitting a respective message
to selected one or more mobile terminals instructing the selected one or more mobile terminals to
not point their respective DRCs toward a sector. Vijayan teaches a CDMA network (see col. 2,

Art Unit: 2683

lines 34-37 & 47-48). Vijayan teaches one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a sector (see col. 11, lines 65-67 and col. 12, lines 1-2). Vijayan teaches an overhead message handler for transmission of data information (see col. 3, lines 65-67 and col. 4, lines 1-4). Vijayan teaches transmitting a respective message to selected one or more mobile terminals (see col. 8, lines 26-30 & 44-45). Vijayan teaches instructing one or more mobile terminals to point their respective DRC's at a specific sector (see col. 11, lines 65-67 and col. 12, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to specifically include a CDMA2000 network, one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a sector, an overhead message handler adapted to receive a queue size, and transmitting a respective message to selected one or more mobile terminals instructing the selected one or more mobile terminals to not point their respective DRCs toward a sector because this would allow for efficient traffic load control in a telecommunications network.

Regarding claim 2 Salonaho teaches a base station controller associated with a base station (see col. 10, lines 23-25). Vijayan teaches a base station that can transmit an overhead message (see col. 8, lines 60-63).

Regarding claim 3 Salonaho teaches a device as recited in claim 1 except for specifically teaching a message that is a QuickConfig message. Vijayan does teach transmitting a respective message to selected one or more mobile terminals (see col. 8, lines 26-30 & 44-45). It would have been obvious to one of ordinary skill in the art at the time the invention was being made to make the message adapt to specifically include a message that is a QuickConfig message because this would allow for efficient broadcast messaging to one or more mobile terminals.

Art Unit: 2683

Regarding claim 6 Salonaho teaches analyzing one or more factors to select a selected one or more mobile terminals to discontinue using a sector for a respective data session (see col. 9, lines 20-23 and col. 10, lines 12-15).

Regarding claim 8 Salonaho teaches selected one or more mobile terminals that perform virtual handoff to one or more adjacent sectors (see col. 10, lines 4-8 & 29-30). Vijayan teaches one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a sector (see col. 11, lines 65-67 and col. 12, lines 1-2).

Regarding claim 9 Vijayan teaches a high data rate system including a base station capable of having a data only carrier capable of providing only data service to one or more mobile terminals (see col. 2, lines 34-40).

Regarding claim 10 Salonaho teaches a telecommunications system for load sharing within a Code Division Multiple Access network (see col. 2, lines 27-30 and col. 4, lines 16-17). Salonaho teaches a network having a base station serving a sector (see col. 7, lines 9-11). Salonaho teaches a base station further storing data packets associated with data sessions involving one or more mobile terminals (see col. 4, lines 33-35, col. 10, lines 23-25, and col. 12, lines 5-6). Salonaho teaches a base station controller storing a predefined threshold for a sector therein, the base station controller being adapted to receive threshold value and compare threshold size with a predefined threshold (see col. 10, lines 23-28 and col. 11, lines 12-16). Salonaho teaches selecting one or more mobile terminals for a communication connection when a threshold value size exceeds a predefined threshold (see col. 9, lines 20-23 and col. 10, lines 12-15). Salonaho teaches prioritizing a subscriber terminal performing handover (see col. 110, lines 29-30). Salonaho does not specifically teach a CDMA2000 network, one or more mobile

Art Unit: 2683

terminals whose respective data rate controls (DRC) are pointed towards a sector, a queue, or transmitting a respective message to selected one or more mobile terminals instructing the selected one or more mobile terminals to not point their respective DRCs toward a sector. Vijayan teaches a CDMA network (see col. 2, lines 34-37 & 47-48). Vijayan teaches one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a sector (see col. 11, lines 65-67 and col. 12, lines 1-2). Vijayan teaches an overhead message handler for transmission of data information (see col. 3, lines 65-67 and col. 4, lines 1-4). Vijayan teaches transmitting a respective message to selected one or more mobile terminals (see col. 8, lines 26-30 & 44-45). Vijayan teaches instructing one or more mobile terminals to point their respective DRC's at a specific sector (see col. 11, lines 65-67 and col. 12, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to specifically include a CDMA2000 network, one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a sector, a queue, and transmitting a respective message to selected one or more mobile terminals instructing the selected one or more mobile terminals to not point their respective DRCs toward a sector because this would allow for efficient traffic load control in a telecommunications network.

Regarding claim 11 Salonaho and Vijayan teach a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 15 Salonaho and Vijayan teach a device as recited in claim 8 and is rejected given the same reasoning as above.

Regarding claim 16 Salonaho and Vijayan teach a device as recited in claim 9 and is rejected given the same reasoning as above.

Art Unit: 2683

Regarding claim 17 Salonaho teaches a telecommunications system within a Code Division Multiple Access network (see col. 4, lines 16-17). Salonaho teaches a predefined threshold for a sector associated with a base station controller (see col. 7, lines 9-11, col. 9, lines 32-33 and col. 10, lines 23-28). Salonaho teaches a base station further storing data packets associated with data sessions involving one or more mobile terminals (see col. 4, lines 33-35, col. 10, lines 23-25, and col. 12, lines 5-6). Salonaho teaches a threshold value having a size and processing means to receive the threshold value (see col. 10, lines 25-28). Salonaho teaches selecting one or more mobile terminals for a communication connection when a threshold value size exceeds a predefined threshold (see col. 9, lines 20-23 and col. 10, lines 12-15). Salonaho teaches prioritizing a subscriber terminal performing handover (see col. 110, lines 29-30). Salonaho does not specifically teach a CDMA2000 network, one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a sector, an overhead message handler adapted to receive a queue size, or transmitting a respective message to selected one or more mobile terminals instructing the selected one or more mobile terminals to not point their respective DRCs toward a sector. Vijayan teaches a CDMA network (see col. 2, lines 34-37 & 47-48). Vijayan teaches one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a sector (see col. 11, lines 65-67 and col. 12, lines 1-2). Vijavan teaches an overhead message handler for transmission of data information (see col. 3, lines 65-67 and col. 4, lines 1-4). Vijayan teaches transmitting a respective message to selected one or more mobile terminals (see col. 8, lines 26-30 & 44-45). Vijayan teaches instructing one or more mobile terminals to point their respective DRC's at a specific sector (see col. 11, lines 65-67 and col. 12, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 2683

invention was made to make the device adapt to specifically include a CDMA2000 network, one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a sector, an overhead message handler adapted to receive a queue size, and transmitting a respective message to selected one or more mobile terminals instructing the selected one or more mobile terminals to not point their respective DRCs toward a sector because this would allow for efficient traffic load control in a telecommunications network.

Regarding claim 18 Salonaho and Vijayan teach a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 21 Salonaho teaches a telecommunications system within a Code
Division Multiple Access network (see col. 4, lines 16-17). Salonaho teaches storing a
predefined threshold for a sector in a CDMA network (see col. 7, lines 9-11, and col. 10, lines
27-28). Salonaho teaches a base station further storing data packets associated with data sessions
involving one or more mobile terminals (see col. 4, lines 33-35, col. 10, lines 23-25, and col. 12,
lines 5-6). Salonaho teaches selecting one or more mobile terminals for a communication
connection when a threshold value size exceeds a predefined threshold (see col. 9, lines 20-23
and col. 10, lines 12-15). Salonaho teaches prioritizing a subscriber terminal performing
handover (see col. 110, lines 29-30). Salonaho does not specifically teach a CDMA2000
network, one or more mobile terminals whose respective data rate controls (DRC) are pointed
towards a sector, or transmitting a respective message to selected one or more mobile terminals
instructing the selected one or more mobile terminals to not point their respective DRCs toward a
sector. Vijayan teaches a CDMA network (see col. 2, lines 34-37 & 47-48). Vijayan teaches
one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a

Art Unit: 2683

sector (see col. 11, lines 65-67 and col. 12, lines 1-2). Vijayan teaches an overhead message handler for transmission of data information (see col. 3, lines 65-67 and col. 4, lines 1-4). Vijayan teaches transmitting a respective message to selected one or more mobile terminals (see col. 8, lines 26-30 & 44-45). Vijayan teaches instructing one or more mobile terminals to point their respective DRC's at a specific sector (see col. 11, lines 65-67 and col. 12, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to specifically include a CDMA2000 network, one or more mobile terminals whose respective data rate controls (DRC) are pointed towards a sector, and transmitting a respective message to selected one or more mobile terminals instructing the selected one or more mobile terminals to not point their respective DRCs toward a sector because this would allow for efficient traffic load control in a telecommunications network.

Regarding claim 25 Salonaho and Vijayan teach a device as recited in claim 8 and is rejected given the same reasoning as above.

Regarding claim 26 Salonaho and Vijayan teach a device as recited in claim 6 and is rejected given the same reasoning as above.

Claims 4-5, 7, 12-14, 19-20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salonaho, in view of Vijayan and Esteves.

Regarding claim 4 Salonaho and Vijayan teach a device as recited in claim 3 except for a QuickConfig message that includes a DRC Lock field, the DRC Lock field having a bit set to 0 indicating that a DRC of a respective selected mobile terminal is not valid. Esteves teaches a DRC field having a bit set to 1 or 0 indicating that a DRC of a respective selected mobile terminal is being received or not (see col. 5, lines 10-13). It would have been obvious to one of ordinary

Art Unit: 2683

skill in the art at the time the invention was made to make the device adapt to include a QuickConfig message that includes a DRC Lock field, the DRC Lock field having a bit set to 0 indicating that a DRC of a respective selected mobile terminal is not valid because this would allow for improved stabilization in a telecommunications network.

Regarding claim 5 Salonaho, Vijayan, and Esteves teach a device as recited in claim 4 except for a QuickConfig message that includes a Reserved field, the Reserved field having one or more bits set to a MAC Index associated with a respective selected mobile terminal. Vijayan does teach a field having one or more bits associated with a respective selected mobile terminal (see col. 11, lines 46-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a QuickConfig message that includes a Reserved field, the Reserved field having one or more bits set to a MAC Index associated with a respective selected mobile terminal because this would allow for efficient broadcast messaging to one or more mobile terminals.

Regarding claim 7 Salonaho and Vijayan teaches a device as recited in claim 1 except for the selected one or more mobile terminals set their DRC cover index to 0 in response to receipt of a message. Salonaho does teach a connection index (see col. 4, line 24). Esteves teaches a terminal that sets a state bit in response to receipt of a DRC message (see col. 6, lines 6-7 & 11-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include selected one or more mobile terminals set their DRC cover index to 0 in response to receipt of a message because this would allow for efficient broadcast messaging to one or more mobile terminals.

Art Unit: 2683

Regarding claim 12 Salonaho, Vijayan, and Esteves teach a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 13 Salonaho, Vijayan, and Esteves teach a device as recited in claim 5 and is rejected given the same reasoning as above.

Regarding claim 14 Salonaho, Vijayan, and Esteves teach a device as recited in claim 7 and is rejected given the same reasoning as above.

Regarding claim 19 Salonaho, Vijayan, and Esteves teach a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 20 Salonaho, Vijayan, and Esteves teach a device as recited in claim 5 and is rejected given the same reasoning as above.

Regarding claim 22 Salonaho and Vijayan teach a device as recited in claim 21 except for a message that is a QuickConfig message, step of transmitting further comprising: setting a bit of a DRC Lock field to 0 indicating that a DRC of a respective selected mobile terminal is not valid. Vijayan does teach transmitting a respective message to selected one or more mobile terminals (see col. 8, lines 26-30 & 44-45). Esteves teaches a DRC field having a bit set to 1 or 0 indicating that a DRC of a respective selected mobile terminal is being received or not (see col. 5, lines 10-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a message that is a QuickConfig message, step of transmitting further comprising: setting a bit of a DRC Lock field to 0 indicating that a DRC of a respective selected mobile terminal is not valid because this would allow for improved stabilization in a telecommunications network.

Arf Unit: 2683

Regarding claim 23 Salonaho, Vijayan, and Esteves teach a device as recited in claim 5 and is rejected given the same reasoning as above.

Regarding claim 24 Salonaho, Vijayan, and Esteves teach a device as recited in claim 7 and is rejected given the same reasoning as above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Laakso U.S Patent No. 6,671,512 discloses a method for traffic load control in a telecommunications network.

Esteves PCT WO 00/54430 discloses methods and apparatus for power allocation on a reverse link power control channel of a communications system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2683

Page 12

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 14, 2004

WILLIAM TROST SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600